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NASHVILLE, TENNESSEE

October 27, 2003

IN RE: )  
 )  
ATMOS ENERGY CORPORATION ) Docket No. 03-00374  
WEATHER NORMALIZATION ADJ. (WNA) AUDIT )

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NOTICE OF FILING BY ENERGY AND WATER DIVISION OF THE  
TENNESSEE REGULATORY AUTHORITY

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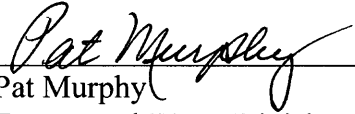
Pursuant to Tenn. Code Ann. §§ 65-4-104, 65-4-111 and 65-3-108, the Energy and Water Division of the Tennessee Regulatory Authority (the "Energy and Water Division") hereby gives notice of its filing of the Atmos Energy Corporation WNA Audit Report in this docket and would respectfully state as follows:

1. The present docket was opened by the Authority to hear matters arising out of the audit of Atmos Energy Corporation (the "Company").
2. The Company's WNA filings were received on November 1, 2002, through April 30, 2003, and the Staff completed its audit of same on July 30, 2003.
3. On October 13, 2003, the Energy and Water Division issued its preliminary WNA audit findings to the Company, and on October 21, 2003, the Company responded thereto.
4. The preliminary WNA audit report was modified to reflect the Company's responses and a final WNA audit report (the "Report") resulted therefrom. The Report is

attached hereto as Exhibit A and is fully incorporated herein by this reference. The Report contains the audit findings of the Energy and Water Division, the Company's responses thereto and the recommendations of the Energy and Water Division in connection therewith.

5. The Energy and Water Division hereby files its Report with the Tennessee Regulatory Authority for deposit as a public record and approval of the recommendations and findings contained therein.

Respectfully Submitted:

  
Pat Murphy  
Energy and Water Division of the  
Tennessee Regulatory Authority

**CERTIFICATE OF SERVICE**

I hereby certify that on this 27th day of October, 2003, a true and exact copy of the foregoing has been either hand-delivered or delivered via U.S. Mail, postage pre-paid, to the following persons:

Deborah Taylor Tate  
Chairman  
Tennessee Regulatory Authority  
460 James Robertson Parkway  
Nashville, TN 37243

Ms. Patricia Childers  
Vice President of Regulatory Affairs  
Atmos Energy Corporation  
810 Crescent Centre, Suite 600  
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Atmos Energy Corporation  
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Pat Murphy

# **EXHIBIT A**

COMPLIANCE AUDIT REPORT

OF

**ATMOS ENERGY CORPORATION**

**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

**Docket No. 03-00374**

PREPARED BY

**TENNESSEE REGULATORY AUTHORITY**

ENERGY AND WATER DIVISION

OCTOBER 2003

**COMPLIANCE AUDIT**  
**UNITED CITIES GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**  
**DOCKET NO. 03-00374**

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**COMPLIANCE AUDIT**  
**ATMOS ENERGY CORPORATION**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**  
**DOCKET NO. 03-00374**

**I. INTRODUCTION AND AUDIT OPINION**

The subject of this compliance audit is the Weather Normalization Adjustment ("WNA") Rider of Atmos Energy Corporation ("Atmos" or "Company").<sup>1</sup> The objective of this audit is to determine if the WNA adjustments were calculated correctly and applied to customers' bills appropriately between November 1, 2002 and April 30, 2003. As a result of the WNA Rider, the Company refunded a net \$823,402 and \$395,803 to the residential and commercial customers respectively during the period. The impact of WNA revenues on the Company's total revenues is detailed in Section V.

The Staff's audit results showed that the Company under-collected \$66,808 from its customers. See Section VI for a description of the Staff's findings. The amount of the over-collection is immaterial (approximately \$0.56 per customer). Therefore, except for the findings noted in this report, Staff concludes that Atmos is correctly implementing the mechanics of the WNA Rider as specified by the Tennessee Regulatory Authority ("TRA" or the "Authority") and included in the Company's tariff. (See Attachment 1)

**II. SCOPE OF AUDIT**

In meeting the objective of the audit, the Staff compared the following on a daily basis:

- (1) the Company's actual heating degree days to National Oceanic and Atmospheric Administration ("NOAA") actual heating degree days;
- (2) the Company's normal heating degree days to the normal heating degree days calculated in the last rate case; and
- (3) the Company's calculation of the WNA factor to Staff's calculation.

Pat Murphy and Butch Phillips of the Energy and Water Division conducted this audit.

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<sup>1</sup> On July 31, 1997, United Cities Gas Company was acquired by Atmos Energy Corporation located in Dallas, Texas. Following the acquisition, the Company continued operating as United Cities Gas Company, a division of Atmos Energy Corporation. On September 4, 2002, Atmos Energy Corporation filed tariffs with the Authority to cease the use of the name "United Cities Gas Company" and to reflect the corporate name of "Atmos Energy Corporation." Effective October 1, 2002, Atmos Energy Corporation announced that all divisions of the company would start doing business as Atmos Energy™.

### **III. BACKGROUND INFORMATION ON THE COMPANY**

Atmos Energy Corporation with its principal office at 810 Crescent Centre Drive, Franklin, Tennessee, is a wholly owned subsidiary of its parent company Atmos Energy Corporation, located in Dallas, Texas. Atmos is a multi-state gas distributor, providing service to multiple communities in Tennessee. The gas to serve these areas is purchased by Woodward Marketing<sup>2</sup>, and delivered by four natural gas pipelines in accordance with separate and individual tariffs approved by the Federal Energy Regulatory Commission. The four interstate pipelines are East Tennessee Natural Gas ("ETNG"), Texas Eastern Transmission Corporation ("TETC"), Columbia Gulf Transmission Corporation ("CGTC"), and Texas Gas Transmission Corporation ("TGTC").

ETNG provides service to Atmos in Tennessee for the Columbia, Shelbyville, Lynchburg, Maryville-Alcoa, Morristown, Bristol, Elizabethton, Gray, Greeneville, Johnson City, and Kingsport areas.

TETC and CGTC provide service to Atmos in Tennessee for Murfreesboro, Nolensville, Franklin, and adjacent areas in Rutherford and Williamson Counties.

TGTC provides service to Atmos in Tennessee to Union City and adjacent areas in Obion County.

### **IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT RIDER**

On September 26, 1991, the Tennessee Public Service Commission<sup>3</sup> ("PSC") approved a three-year experimental Weather Normalization Adjustment Rider to the tariffs of Chattanooga Gas Company, Nashville Gas Company, a division of Piedmont Gas Company, Inc. and United Cities Gas Company.<sup>4</sup> The WNA Rider was to be applied to residential and commercial customers' bills during the months of October through May of each year (*See Attachment 1*). On June 21, 1994, the PSC issued an Order authorizing the above mentioned gas companies to permanently implement an amended version of the WNA Rider. Atmos is authorized to calculate WNA adjustments during the months of November through April of each year.<sup>5</sup> The TRA Staff annually audits these calculations.

In setting rates, the Tennessee Regulatory Authority uses a normalized level of revenues and expenses for a test year, which is designed to be the most reasonable estimate of the Company's operations during the time the rates are to be in effect. Use of normalized operating

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<sup>2</sup> Woodward Marketing is the wholly owned marketing arm of Atmos Energy Corporation.

<sup>3</sup> By legislative action, the Public Service Commission was replaced on July 1, 1996 by the Tennessee Regulatory Authority. *See* Act of May 24, 1995, ch. 305, 1995 Tenn. Pub. Acts 450. The TRA retains jurisdiction over the above named gas companies. *See* Tenn. Code Ann. § 65-4-104; *see also* Tenn. Code Ann. § 65-4-101 (a) (defining public utility).

<sup>4</sup> *See* petition of Chattanooga Gas Company, Nashville Gas Company, a Division of Piedmont Natural Gas Company, Inc. and United Cities Gas Company for a Rulemaking Hearing to Adopt a Weather Normalization Adjustment (WNA) Rider, Docket No. 91-01712, *Order* (September 26, 1991).

<sup>5</sup> The amendment directed Chattanooga Gas Company and United Cities Gas Company to eliminate from their WNA Rider the shoulder months of October and May, and Nashville Gas Company to eliminate the shoulder months of October, April and May.

levels eliminates unusual fluctuations that may occur during the test period, which causes rates to be set too high or too low.

Specifically, one part of normalizing revenues consists of either increasing or decreasing the test year weather related sales volumes to reflect the difference between the normal and actual heating degree days. (A heating degree day is calculated as the difference in the average daily temperature and 65 degrees Fahrenheit.) This average daily temperature constitutes normal weather and is determined based on the previous thirty years weather data.

However, normal weather rarely occurs. This has two impacts:

- (1) The customers' bills fluctuate dramatically due to changes in weather from month to month; and
- (2) The gas companies earn more or less than their authorized rate of return. For example, if weather is colder than normal, then more gas than anticipated in the rate case will be sold. This results in higher customer bills and overearnings for the company. On the other hand, if weather is warmer than normal, less gas than anticipated in the rate case will be sold, the customers' bills will be lower and the company will underearn.

In recognition of this fact, the TRA approved an experimental WNA mechanism, which became permanent on June 21, 1994, to reduce the impact abnormal weather has on the customers' bills and on the gas utilities' operations. In periods of weather colder than normal, the customer receives a credit on his bill, while in periods of warmer than normal weather, the customer is billed a surcharge. Thus, customers' monthly bills should not fluctuate as dramatically and the gas company should have a more stable rate of return.



## **V. IMPACT OF WEATHER NORMALIZATION ADJUSTMENT RIDER**

The graphs appearing at the end of this section show a comparison of actual heating degree days to normal heating degree days for Atmos Energy Corporation during the 2002 - 2003 heating season, in each of its four service areas. Weather conditions changed dramatically from the previous winter, where overall weather was warmer than normal. During the past winter, overall, weather was 3.6% colder in the Bristol area, 2.0% colder in the Knoxville area, 5.6% colder in the Nashville area, and 11.5% colder in the Paducah area. The following tables show a comparison of the actual degree days (ADD) to normal degree days (NDD) by month for the four weather stations.

### **Bristol:**

<u>Month</u>	<u>ADD</u>	<u>NDD</u>	<u>Percent Change</u>	
November 2002	635	531	19.6%	Colder
December 2002	841	805	4.5%	Colder
January 2003	1059	937	13.0%	Colder
February 2003	772	756	2.1%	Colder
March 2003	449	553	18.8%	Warmer
April 2003	<u>249</u>	<u>284</u>	12.3%	Warmer
Total	<u>4005</u>	<u>3866</u>	3.6%	Colder

### **Knoxville:**

<u>Month</u>	<u>ADD</u>	<u>NDD</u>	<u>Percent Change</u>	
November 2002	555	460	20.7%	Colder
December 2002	749	726	3.2%	Colder
January 2003	957	853	12.2%	Colder
February 2003	669	665	0.6%	Colder
March 2003	358	463	22.7%	Warmer
April 2003	<u>148</u>	<u>203</u>	27.1%	Warmer
Total	<u>3436</u>	<u>3370</u>	2.0%	Colder

**Nashville:**

Month	ADD	NDD	Percent Change	
November 2002	554	451	22.8%	Colder
December 2002	752	729	3.2%	Colder
January 2003	991	870	13.9%	Colder
February 2003	748	678	10.3%	Colder
March 2003	393	466	15.7%	Warmer
April 2003	<u>147</u>	<u>201</u>	26.9%	Warmer
Total	<u>3585</u>	<u>3395</u>	5.6%	Colder

**Paducah:**

Month	ADD	NDD	Percent Change	
November 2002	606	483	25.5%	Colder
December 2002	825	797	3.5%	Colder
January 2003	1109	954	16.2%	Colder
February 2003	854	736	16.0%	Colder
March 2003	514	503	2.2%	Colder
April 2003	<u>187</u>	<u>199</u>	6.0%	Warmer
Total	<u>4095</u>	<u>3672</u>	11.5%	Colder

Due to the fact that overall the winter was colder than normal, the net impact the WNA Rider had on the Company's revenues was that residential and commercial customers were **refunded** \$823,402 and \$395,803 respectively. This equates to a decrease in revenues from residential and commercial sales of 4.13% and 2.93% respectively. (See Table 1) This is down from the previous year when the residential and commercial customers were **surcharged** \$1,496,387 and \$766,175 respectively. (See Table 2)

Table 1

**Impact of WNA Rider on Residential & Commercial Revenues  
November 1, 2002 - April 30, 2003**

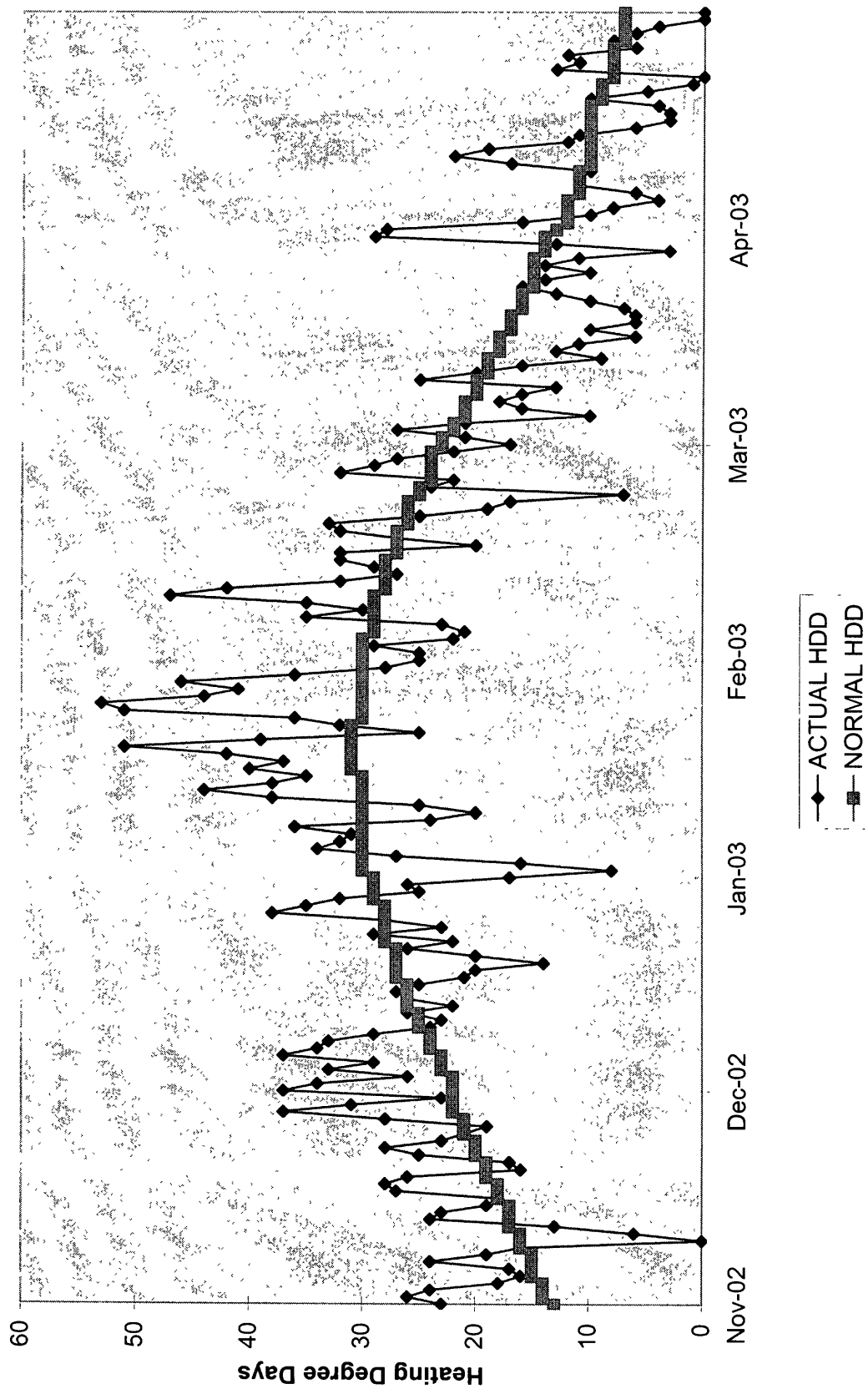
	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	<u>Percentage Impact of WNA Rider On Revenues</u>
Residential Sales	\$-823,402	\$19,959,100	4.13%
Commercial Sales	<u>-395,803</u>	<u>13,529,334</u>	2.93%
Total	<u>\$-1,219,205</u>	<u>\$33,488,434</u>	3.64%

Table 2

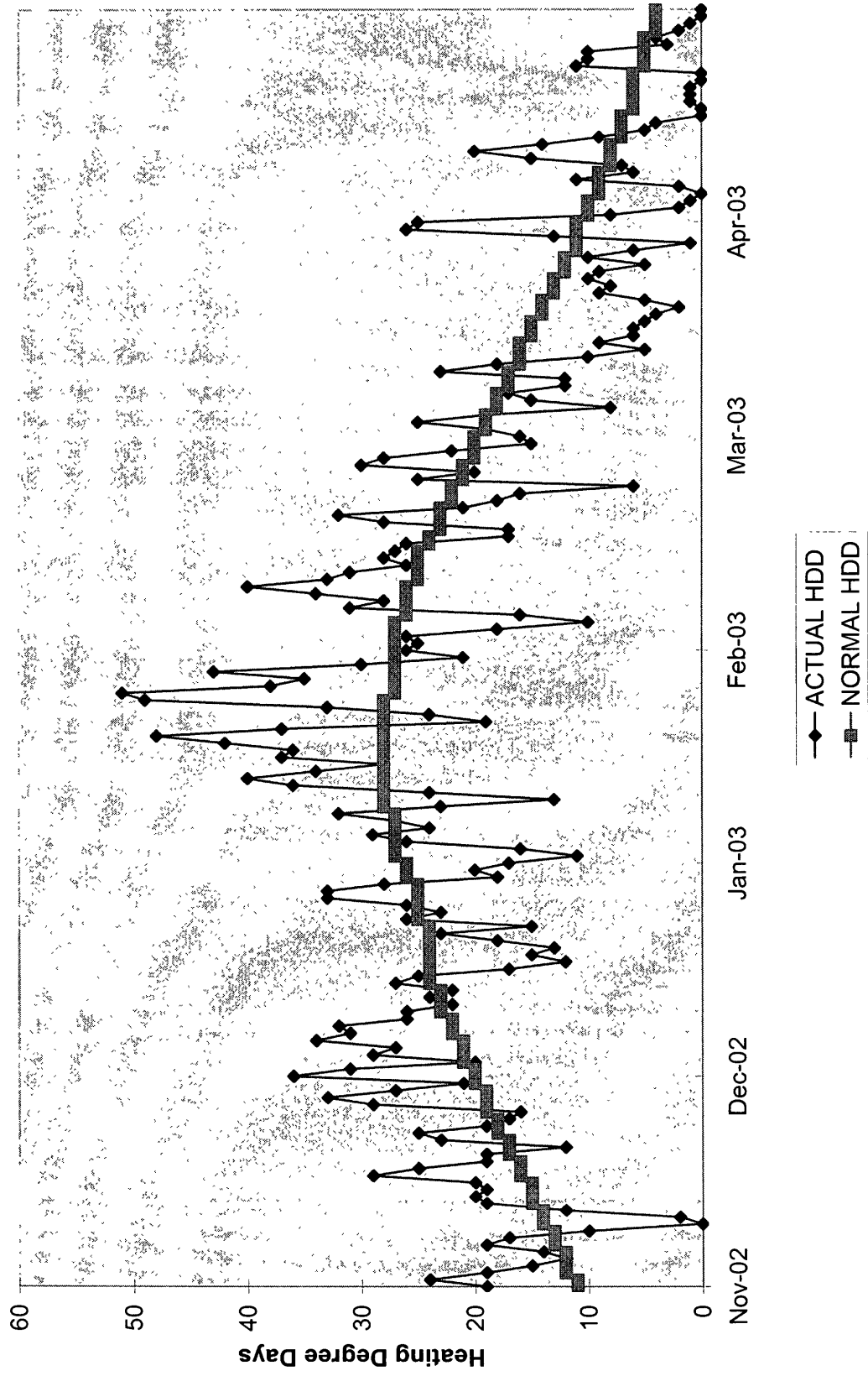
**Amount Surcharged (Refunded)  
2000 - 2003**

	<u>Residential</u>	<u>Commercial</u>	<u>Total Surcharge/(Refund)</u>
11/00-4/01	\$ -1,235,609	\$ -686,731	\$ -1,922,340
11/01-4/02	1,496,387	766,175	2,262,562
11/02-4/03	<u>-823,402</u>	<u>-395,803</u>	<u>-1,219,205</u>
Total	<u>\$ -562,624</u>	<u>\$ -316,359</u>	<u>\$ -878,983</u>

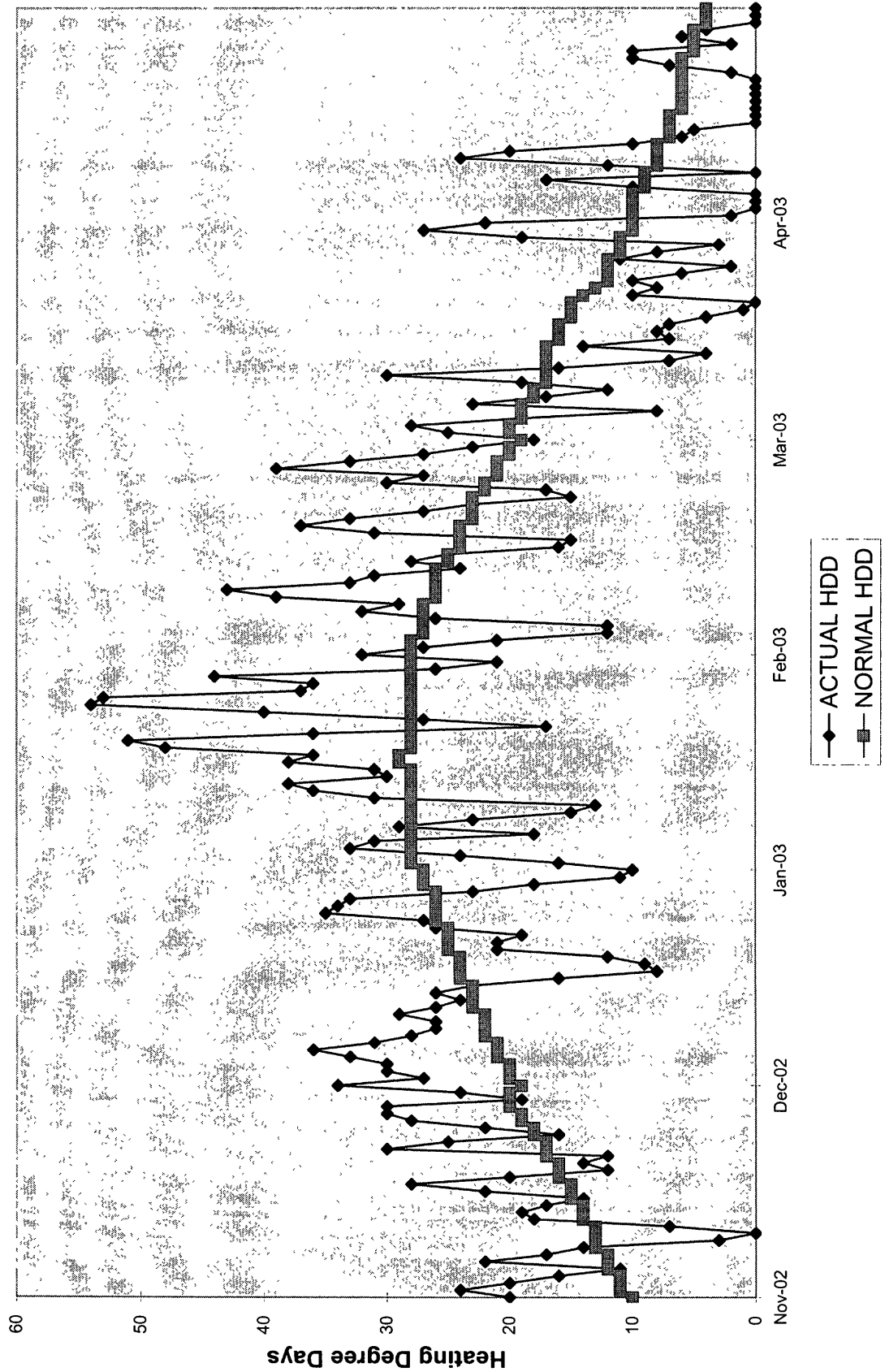
**United Cities Gas Company**  
**Comparison of Actual to Normal Heating Degree Days**  
**Bristol Weather Station**



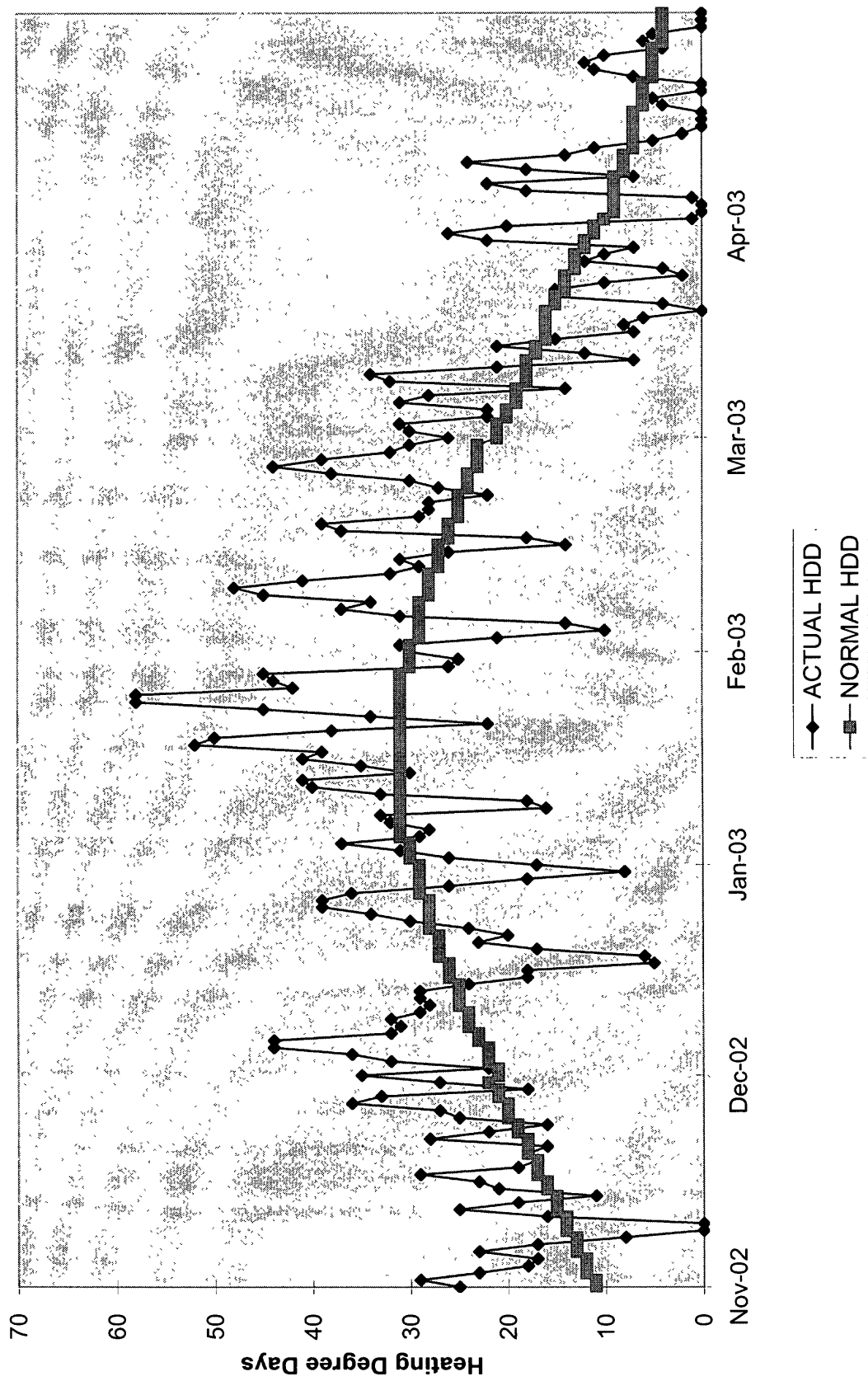
**United Cities Gas Company**  
**Comparison of Actual to Normal Heating Degree Days**  
**Knoxville Weather Station**



**United Cities Gas Company**  
**Comparison of Actual to Normal Heating Degree Days**  
**Nashville Weather Station**



**United Cities Gas Company**  
**Comparison of Actual to Normal Heating Degree Days**  
**Paducah Weather Station**



## VI. WNA AUDIT FINDINGS

The Staff's audit results showed an **under-recovery** from Atmos's ratepayers in the amount of **\$66,808** (summarized below). This under-recovery resulted from two (2) findings, which are explained on the following pages.

<u>Weather Station</u>	<u>Company Filed</u>	<u>Staff Corrected Filing</u>	<u>Difference</u>	<u>Under/(Over)- Recovery</u>
Bristol	\$ -267,044.55	\$ -267,719.85	\$ -675.30	Over-Recovery
Knoxville	-89,938.28	-83,739.80	6,198.48	Under-Recovery
Nashville	-754,812.51	-691,312.86	63,499.65	Under-Recovery
Paducah	<u>-107,116.07</u>	<u>-109,330.89</u>	<u>-2,214.82</u>	Over-Recovery
<b>Total</b>	<b><u>\$ (1,218,911.41)</u></b>	<b><u>\$ (1,152,103.40)</u></b>	<b><u>\$ 66,808.01</u></b>	<b><i>Under-Recovery</i></b>

### SUMMARY:

				Page
FINDING #1	Inaccurate daily heating degree days	\$57,897	Under-recovery	8
FINDING #2	Failure to bill WNA factor	<u>8,911</u>	Under-recovery	10
	<b>TOTAL</b>	<b><u>\$66,808</u></b>		



## **FINDING #1:**

### **Exception**

The Company used inaccurate actual daily heating degree days in the calculation of the WNA factor.

### **Discussion**

The audit period consisted of 848 weather observations (212 days in the period times four weather stations). Staff's audit indicates that the Company used inaccurate actual daily heating degree days in the calculation of the WNA factor on 5 days of the WNA period for the Paducah weather station, 5 days for the Nashville weather station, 4 days for the Knoxville weather station, and 1 day for the Bristol weather station, for a total of fifteen (15) weather observations. These inaccuracies resulted from the fact that, for the days in question, daily heating degree days published in NOAA's Local Climatological Data report<sup>6</sup> differed from the daily heating degree days that the Company used in calculating its WNA factors.<sup>7</sup>

The Company's error rate in calculating the WNA factor during this audit period was 1.8%. This is significant in that it represents a great improvement over the error rate of 35% discovered in the last audit period. The unusually high rate of inaccuracies in the use of actual degree days during the 2001-2002 audit period was attributed to errors in reporting made by the Company's weather provider SSI (Surface Systems, Inc.). The Company indicated in its reply to last year's audit finding that it had terminated its contract with SSI and contracted with its previous weather provider Weather Markets for the 2002-2003 heating season.

Nine (9) of the fifteen (15) differences mentioned above were one degree-day. The one-day differences can sometimes be explained by rounding differences in the formula used to calculate the number of degree days on a specific day. See the Company's Response below for a more complete explanation of the reasons for larger differences noted on six (6) of the days.

<b>Weather Station/ Date</b>	<b>Company Actual Degree Days</b>	<b>NOAA Actual Degree Days</b>	<b>Difference</b>
<b><u>Paducah:</u></b>			
11/11/2002	15	16	1
11/19/2002	16	17	1
11/30/2002	26	27	1
02/03/2003	6	14	8
02/04/2003	30	31	<u>1</u>
			12

<sup>6</sup> This published report is the official data supplied by NOAA and is the standard that the Staff uses to audit the Weather Normalization Rider.

<sup>7</sup> See Table below for detail of the differences.

Weather Station/ Date	Company Actual Degree Days	NOAA Actual Degree Days	Difference
<b><u>Nashville:</u></b>			
11/22/2002	28	30	2
12/31/2002	21	10	-11
01/07/2003	31	23	-8
01/09/2003	12	13	1
02/16/2003	30	31	<u>1</u>
			-15
<b><u>Knoxville:</u></b>			
10/07/2002	1	2	1
02/06/2003	24	28	4
02/14/2003	27	26	-1
04/01/2003	11	8	<u>-3</u>
			1
<b><u>Bristol:</u></b>			
11/13/2002	23	24	<u>1</u>
			1
		Net	<u>-1</u>

The net result of these actual degree day errors is that customers were **under-charged \$57,897.**

### **Company Response**

The Company agrees with the audit finding and regrets the use of all incorrect weather data.

The Company used the degree day data as provided by Weather Markets, the weather provider. The Company will speak to the weather provider's quality control people to instill in them the importance of accurate daily data. As you know, the weather data is downloaded each day and does not provide a lot of time for Weather Markets to review their data but the Company certainly strives to receive the most accurate data.

## **FINDING #2:**

### **Exception**

The Company failed to bill a WNA adjustment to customers in November, whose billing cycles ended prior to November 1.

### **Discussion**

Some billing cycles for November in the Nashville and Knoxville areas were read by meter readers a few days prior to November 1. For these customers, the Company's computer billing program failed to calculate a WNA factor. As a result, the WNA surcharges were not billed.

The net result of this billing error is that customers were **under-charged \$8,911**.

### **Company Response**

Prior to each heating season all Tennessee town managers and supervisors are asked not to read cycles early during the WNA months. This past season we were less than 100% in compliance with this directive. We have again instructed our Tennessee towns to adhere strictly to the NO EARLY reads policy. We regret that we did not receive full compliance this past season but will continue to take this audit exception seriously.

## **VII. RECOMMENDATIONS AND CONCLUSIONS**

The Company has responded to the Staff's audit findings and we are satisfied that the Company is appropriately addressing these areas of deficiency. As stated in Section I, except for the findings noted, the Staff concludes that Atmos is correctly implementing the mechanics of its WNA Rider. We recommend that the Company include this under-collection in its next Refund Due Customers filing with the TRA. This is the method the Company has customarily used.

## ATMOS ENERGY CORPORATION

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDERProvisions for Adjustment

The base rate per therm/Ccf (100,000 Btu) for gas service set forth in any Rate Schedules utilized by the Tennessee Regulatory Authority in determining normalized test period revenues shall be adjusted by an amount hereinafter described, which amount is referred to as the "Weather Normalization Adjustment." The Weather Normalization Adjustment shall apply to all residential and commercial bills based on meters read during the revenue months of November through April.

Definitions

For purpose of this Rider:

"Regulatory Authority" means the Tennessee Regulatory Authority

"Relevant Rate Order" means the final order of the Regulatory Authority in the most recent litigated rate case of the Company fixing the rates of the Company or the most recent final order of the Regulatory Authority specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

Computation of Weather Normalization Adjustment

The Weather Normalization Adjustment shall be computed to the nearest one-hundredth cent per therm/Ccf by the following formula:

$$WNA_i = R_i \frac{(HSF_i \quad (NDD-ADD) \quad )}{(BL_i \quad + \quad (HSF_i \times ADD))}$$

Where

- $i$  = any particular Rate Schedule or billing classification within any such particular Rate Schedule that contains more than one billing classification
- $WNA_i$  = Weather Normalization Adjustment Factor for the  $i^{\text{th}}$  rate schedule or classification expressed in cents per therm/Ccf
- $R_i$  = weighted average base rate of temperature sensitive sales for the  $i^{\text{th}}$  schedule or classification utilized by the Tennessee Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER (Continued)

HSF <sub>i</sub>	=	heat sensitive factor for the i <sup>th</sup> schedule or classification utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues
NDD	=	normal billing cycle heating degree days utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues
ADD	=	actual billing cycle heating degree days
Bl <sub>i</sub>	=	base load sales for the i <sup>th</sup> schedule or classification utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

Filing with Regulatory Authority

The Company will file as directed by the Regulatory Authority (a) a copy of each computation of the Weather Normalization Adjustment, (b) a schedule showing the effective date of each such Weather Normalization Adjustment, and (c) a schedule showing the factors or values derived from the Relevant Rate Order used in calculating such Weather Normalization Adjustment.

Heat Use/Base Use Factors

<u>Town</u>	<u>Residential</u>		<u>Commercial</u>	
	<u>Base use</u> <u>Ccf</u>	<u>Heat use</u> <u>Ccf/HDD</u>	<u>Base use</u> <u>Ccf</u>	<u>Heat use</u> <u>Ccf/HDD</u>
Union City	13.906292	.156369	124.595029	.453633
Columbia Shelbyville Franklin Murfreesboro	13.035323	.173948	99.021858	.624513
Maryville Morristown	13.886330	.153366	111.454966	.658649
Johnson City Elizabethton Kingsport Greeneville Bristol	10.696903	.162066	169.773651	.611201